Detection and Recovery from
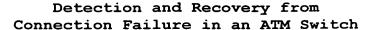# Connection Failure in an ATM Switch

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5   ABSTRACT OF THE DISCLOSURE

An ATM switch includes a memory and a control circuit. The control circuit maintains in the memory a connection table which includes a multicast master entry and one or more multicast member entries

10   associated with the multicast master entry. The multicast master entry includes a limit field and a count field. The limit field is set to a predefined value and the count field is initialized to a predefined initial value. The limit field and said

15   count field are compared to determine an active status each one of the multicast member entries. In one embodiment, the control circuit increments the count field whenever an ATM cell is received and decrements the count field whenever an ATM cell is transmitted.

20   When the count field is equal to or greater than the limit field, a connection failure is declared for the multicast member entry currently being transmitted and the member entry is set to an inactive status. The member entry can be removed from the connection table.